

CLAIMS

We claim:

Sub A3
1. A system for managing rubber-covered cylinder sleeves for an offset rotary printing machine, said system comprising
a storage apparatus for storing said sleeves when not in use in said printing machine;
a main electronic memory device into which characteristic data for each sleeve can be entered, stored, and managed;
means for introducing the sleeves into the storage apparatus;
means for reading the characteristic data into the memory device as one of the sleeves is introduced into the storage apparatus; and
means for removing one of said sleeves from the storage apparatus in accordance with predefined data and said characteristic data.

2. A system as in claim 1 wherein said characteristic data comprise at least one of data which identify the individual sleeve and operating data and data about damage status.

3. A system as in claim 1 wherein said storage has individual sleeve storage spaces which are arranged at least one of beside one another and above one another and behind one another and such that they can circulate and such that they can be moved.

4. A system as in claim 3 wherein said individual sleeve storage spaces can be moved to a storage and removal position.

1 5. A system as in claim 1 further comprising an identifier arranged on each
2 sleeve, said characteristic data for each sleeve being assignable to the respective identifier and
3 readable into the main memory device at the time of storage.

1 6. A system as in claim 1 further comprising an auxiliary electronic memory
2 device assigned to each said sleeve, said auxiliary electronic memory device carrying an identity
3 number by means of which the characteristic data can be assigned to the respective sleeve and
4 read into the main memory device at the time of storage.

1 7. A system as in claim 6 wherein said identity number can be read from the
2 auxiliary memory device into the main memory device at the time of storage.

1 8. A system as in claim 1 further comprising an auxiliary electronic memory
2 device assigned to each said sleeve, said characteristic data being stored on the auxiliary memory
3 device and read into the main memory device at the time of storage.

1 9. A system as in claim 5 further comprising one of a data reader and a
2 scanner by means of which the identifier can be read into the main memory device, at least one
3 of the characteristic data that can be assigned to the identifier and changed characteristic data and
4 data about damage status being exchangeable between the main memory device and computing
5 and memory devices of printing machines, and being stored on the respective memory devices.

1 10. A system as in claim 6 further comprising a data reader by means of which
2 the identity number can be read from the auxiliary memory device into the main memory device,
3 at least one of the characteristic data that can be assigned to the identifier and changed

4 characteristic data and data about damage status being exchangeable between the main memory
5 device and computing and memory devices of printing machines, and being stored on the
6 respective memory devices.

1 11. A system as in claim 10 comprising one of said data readers associated
2 with said storage apparatus and with each of a plurality of printing units.

1 12. A system as in claim 11 wherein said data readers are configured as data
2 exchange devices, whereby said characteristic data can be exchanged between the main memory
3 device and the computing and memory devices of printing machines and stored.

1 13. A system as in claim 6 wherein said auxiliary memory device provides
2 means for data transmission and exchange between the main memory device and computing and
3 memory devices of the printing machines.

1 14. A system as in claim 6 wherein said auxiliary memory device comprises a
2 transponder.

1 15. A system as in claim 8 wherein data is read from said auxiliary memory
2 device without contact.

1 16. A system as in claim 1 further comprising computing and memory devices
2 of a printing machine, said main memory device being integrated into at least one of said
3 computing and memory devices.

1 17. A system as in claim 1 further comprising computing and memory devices
2 for printing machines, said main memory device and said computing and memory devices being
3 integrated into at least one memory unit.

1 18. A system as in claim 1 further comprising a transport apparatus for
2 transporting the sleeves from the storage apparatus to the printing machine.

1 19. A system as in claim 1 further comprising means for identifying the
2 sleeves arranged on the storage apparatus.

1 20. A system as in claim 2 further comprising means for determining data
2 about the damage status of the rubber-covered cylinder sleeves.

1 21. A system as in claim 2 further comprising a hand-held input device into
2 which data about the damage status of the sleeves can be entered.

1 22. A system as in claim 20 further comprising computing and memory
2 devices for printing machines, said data about damage status being transmitted to one of the main
3 memory device and the computing and memory devices.

1 23. A system as in claim 1 further comprising means for automatically
2 initiating and carrying out ordering of new sleeves by means by said characteristic data stored in
3 said main memory device.

1 24. A system as in claim 1 further comprising means for calculating statistics
2 about the probability of failure of the sleeves by means by said characteristic data stored in said
3 main memory device.

1 25. A system as in claim 1 further comprising an auxiliary electronic memory
2 device arranged on each said sleeve, said characteristic data being stored on the auxiliary
3 memory device and read into the main memory device at the time of storage.

1 26. A system as in claim 25 further comprising a main data exchange device
2 by means of which the characteristic data can be read from the auxiliary memory device into the
3 main memory device, and at least one of new characteristic data and changed characteristic data
4 and data from the main memory device can be written and stored on the auxiliary memory
5 device.

1 27. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine and an auxiliary data exchange device arranged in each printing
3 unit, said characteristic data being read from the main memory device into the computing and
4 memory device by said auxiliary data exchange device, and at least one of new characteristic
5 data and changed characteristic data from the computing and memory device can be written on
6 said auxiliary memory device.

1 28. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine, said auxiliary memory device providing data exchange
3 between the computing and memory device and the main memory device.

1 29. A system as in claim 25 wherein each said auxiliary memory device
2 comprises a transponder.

1 30. A system as in claim 26 wherein data is between said auxiliary memory
2 device and said main data exchange device without contact.

1 31. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine, and means for determining data about the damage status of the
3 rubber-covered cylinder sleeves and transmitting the data to at least one of the main memory
4 device and the computing and memory devices.

1 32. A system as in claim 25 further comprising a computing and memory
2 device for each printing machine and a hand-held input device into which data about the damage
3 status of the sleeves can be entered and transmitted to at least one of the main memory device
4 and the computing and memory devices.

1 33. A system as in claim 1 wherein said main electronic memory device
2 comprises an interface which is accessible from an external location.

1 34. A system as in claim 33 wherein the characteristic data stored in the main
2 memory device can be called up from the external location via the interface, and new
3 characteristic data can be transmitted into the memory device via the interface and stored.

1 35. A rubber covered cylinder sleeve for offset printing, said sleeve
2 comprising an inner support sleeve, a rubber layer arranged on said inner support sleeve, and an
3 electronic memory device containing characteristic data about the sleeve.

1 36. A rubber-covered cylinder sleeve as in claim 35 wherein said memory
2 device is embedded in the rubber layer.

1 37. A rubber covered cylinder sleeve as in claim 35 wherein said electronic
2 memory device does not effect any widening of the rubber-covered cylinder sleeve.

1 38. A rubber-covered cylinder sleeve as in claim 35 wherein said rubber layer
2 has a non-printing marginal area, said memory device being arranged in said non-printing
3 marginal layer.

1 39. A rubber-covered cylinder sleeve as in claim 35 wherein said memory
2 device comprises a transponder.

1 40. A rubber covered cylinder sleeve as in claim 35 wherein, by means of a
2 data exchange device, the characteristic data can be read from the memory device, and at least
3 one of new characteristic data and changed characteristic data can be written and stored on the
4 memory device.

1 41. A rubber-covered cylinder sleeve as in claim 40 wherein said data
2 exchange device is at least one of arranged in a printing machine and configured as a portable
3 hand-held device.

1 42. A rubber-covered cylinder sleeve as in claim 40 wherein the data
2 exchange between the memory device and the data exchange device takes place without contact.

1 43. A rubber-covered cylinder sleeve as in claim 40 wherein the data-
2 exchange device can be operated by hand.

1 44. A rubber-covered cylinder sleeve as in claim 40 wherein the data
2 exchange device is connected to a computing and memory unit in which the characteristic data
3 can be calculated.

1 45. A rubber-covered cylinder sleeve as in claim 43 wherein the data
2 exchange device is connected to a machine control system of a printing machine.

1 46. A rubber-covered cylinder sleeve as in claim 44 wherein the characteristic
2 data can be transmitted manually by an operator to the computing and memory unit.

1 47. A method of managing rubber-covered cylinder sleeves for offset printing,
2 said method comprising

3 equipping each said sleeve with an identifier,
4 assigning characteristic data about each sleeve to the respective identifier,
5 reading said characteristic data from said identifiers into a computing and
6 memory device of a rotary printing machine,
7 transmitting said characteristic data from said computing and memory devices to
8 a main memory device of a storage apparatus for said sleeves, and

9 storing said characteristic data in said main memory device.

1 48. A method of managing rubber-covered cylinder sleeves for offset printing,
2 said method comprising
3 equipping each said sleeve with an auxiliary memory device,
4 applying characteristic data about each said sleeve to the respective memory
5 device while said sleeve is still located in a printing unit, and
6 transmitting said characteristic data from said auxiliary memory device to a main
7 memory device of a storage apparatus for said sleeves when said sleeve is stored in said storage
8 apparatus.